

XLVIII. *An Account of the Eruption of Mount Vesuvius, from its first Beginning to the 28th of October 1751, in a Letter from Mr. Richard Supple, communicated by Mr. Benjamin Wilson, F. R. S.*

Read Dec. 19, 1751. **O**N the 23d of September 1751, at 11 in the morning, there was an earthquake, which was felt more or less, as we were nearer or farther off from the mountain. It lasted near 2 minutes very sensibly in the city of Naples; but most so in that part, which lies nearest the mountain. We make no doubt but it was at this instant, that the eruption of burning matter or lava was made.

The mouth, from which this lava issued, was discovered on the 24th in the evening, as it run out, and down into a deep valley between the canal of and the tower of Launomiado. The lava did not appear on the face of the valley, which it had just filled, till the 26th in the morning. Then it took a serpentine course through several antient chanel, where the lava had run, and appeared on the lands.

On the 27th in the morning, the lava having run two miles from the mouth whence it issued, it advanced with a breadth of 300 feet, and 30 deep, and pretty slow.

From this frightful mass of burning matter there issue two principal streams of lava, that have filled two valleys, which are near 200 feet deep. One of

those streams advances about 3 feet and a half in a minute; and the other about 3.

The first has advanced already one mile into the plain, which has a descent into that of Siena, between the tower of Launomiade and Seoffata, and moves on with a stream of 100 feet broad, and about 6 feet deep. It has actually gone 4 miles from its head or mouth. I approached within 10 feet of this river of fire, and put a branch of a tree, just cut off, so near it, as to be distant about 3 inches, which it instantly burnt without any smoke. I had my face changed yellow with the smoke or steam that issued from the lava; and this smoke was so violent, as to take away my breath, and made me apprehensive of losing my life.

The other lava flows directly towards the village of Launomiade, and is still advancing. All the inhabitants have abandoned that village, fearing it may share the fate with Herculaneum and Stabia. The main stream ruined in the night, between the 27th and 28th, a tract of half a mile. It has divided itself into 12 branches, according to the situation of the land, and these again have united, and become one stream.

The lava seems to be much more charged with metals and fire than any of the former; and the eruption appears to send out 10 times more matter than that in 1737: but that was much more frightful, from the continual thunder it made, and by the burning matter that it threw to a prodigious height; and which afterwards run down to the foot of the mountain, leaving behind it a ridge of fire, which, during the night, had an effect as surprising as terrible.

If the first branch continues, it will cross the high road from Naples to Salerno, and throw itself into the river Sarno, and change its course, and may go as far as Stabia, as it did in the reign of Titus Vespasian; though this buried city is twelve miles from the top of mount Vesuvius.

Marfeilles, 7 Nov. 1751.

Richard Supple.

XLIX. *An Account of the Eclipse of the Moon, which happened Nov. 21, 1751; observed by Mr. James Short, F. R. S. in Surry-street.*

Read Dec. 19, 1751. **T**HE weather was exceedingly tempestuous, and the sky pretty much overcast with clouds, so that the following times cannot be depended upon to less than 2 minutes.

Penumbra very visible at	.	.	7	58	0
Beginning of the eclipse at	.	.	8	6	0
End of the eclipse at	.	.	11	6	0

The quantity of this eclipse seemed about the middle to be larger than according to all the tables; but its quantity, tho' the air was then exceedingly clear, could not be measured in the micrometer, because of the high wind; nor could the moon's diameter be measured, for the same reason.

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